**P**06

11/16/06

1

2

3

4

5

6

1

1.

2

1

1

2

ı

1

2 3

1

1 2

1

2

2

Serial No. 08/787,651

### AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

### **LISTING OF CLAIMS:**

1. (original) A method for assembling carbon particles into at least one fiber, the method comprising the steps of:

aligning said carbon particles by flowing a mixture of said carbon molecules and a curable liquid down a tapering tube starting at a first end of said tapering tube; and

curing said flowing mixture at least near a second end of said tapering tube whereby a fiber is formed.

2. (original) The invention as defined in claim 1 further comprising the step of dispersing said carbon particles within said curable liquid to form said mixture.

3. (original) The invention as defined in claim 1 wherein said curable liquid cures, at least in part, in the presence of ultraviolet light.

4. (original) The invention as defined in claim 1 further comprising the step of heating said fiber so as to cause at least some volatile elements therein to substantially dissipate therefrom.

5. (original) The invention as defined in claim 1 further comprising the step of twisting said fiber.

6. (original) The invention as defined in claim 1 further comprising the step of increasing the density of said fiber.

7. (original) The invention as defined in claim 1 comprising the step of heating said fiber.

D:\PATENTS\Greywall 35\Greywall 35-19 am.doc

# Serial No. 08/787,651

15:06

1 2	8. (original) The invention as defined in claim 1 comprising the step of sintering at least some of said carbon particles within said fiber.
1	9. (original) The invention as defined in claim 1 comprising the step of cladding
2	said fiber.
ı	
ì	10. (original) The invention as defined in claim 1 comprising the step of spooling
2	said fiber onto a take-up drum.
1 2	11. (Currently amended) The invention as defined in claim 1 wherein said curable liquid is comprises at least one of the group consisting of:
3	(i) a copolymer of (a) methylmethacrylate with (b) the ester of methacrylic acid
4	and anthaceyl methanol; and
5	(ii) PS2067.
1	12. (original) The invention as defined in claim 1 wherein carbon particles
2	comprise at least carbon nanotube molecules.
1	13. (original) The invention as defined in claim I wherein carbon particles
2	comprise at least carbon fibrils.
1	14. (withdrawn) A fiber produced by the process defined in claim 1.
1	15. (original) The invention as defined in claim 1 wherein said curing step is
2	performed, at least in part, by shining ultraviolet light upon said mix ure.
1	16. (original) The invention as defined in claim 1 wherein said curing is
2	performed at least in part while said mixture remains within said tapering tube.

## Scrial No. 08/787,651

- 1 17. (original) The invention as defined in claim 1 wherein said tapering tube has a 2 portion that is at least partially translucent to ultraviolet light.
- (original) The invention as defined in claim 1 wherein said curing is 1 performed at least in part after said mixture has exited from said tapering tube. 2
- 19. (original) A method for assembling carbon particles into at least one aligned 1 2 fiber, the method comprising the step of passing a curable liquid containing carbon 3 through a tapering tube, whereby said carbon particles become substantially aligned.
- 20. (original) The invention as defined in claim 19 wherein said carbon particles 1 2 are carbon nanotube molecules.
- J 21. (original) The invention as defined in claim 19 wherein said carbon particles 2 are carbon fibrils.
- 1 22. (withdrawn) A carbon particle fiber comprising carbon particles that were aligned at least in part by being flowed through a tapering tube as part of a curable liquid.
- 23. (withdrawn) The invention as defined in claim 22 wherein said carbon 1 2 particles are carbon nanotube molecules.
- 24. (withdrawn) The invention as defined in claim 22 wherein said carbon 1 2 particles are carbon fibrils.
- (withdrawn) A carbon particle fiber comprising substantially only aligned t carbon particles that were aligned at least in part while intermixed within a carrier 2 3 substance.

### Serial No. 08/787,651

15:06

- ١. 26. (withdrawn) The invention as defined in claim 25 wherein said carbon particles are carbon nanotube molecules. 2
- **27**. (withdrawn) The invention as defined in claim 25 wherein said carbon J 2 particles are carbon fibrils.
- 28. (original) A method for assembling carbon particles into at least one fiber, ١ 2 the method comprising the steps of:
- aligning said carbon particles by flowing a mixture of said carbon molecules and a 4 curable liquid down a tapering tube starting at a first end of said tapering tube;
- curing said flowing mixture at least near a second end of said tapering tube using 5 6 ultraviolet light whereby a fiber is formed;
- 7 heating said fiber so as to cause any volatile elements from said solidified curable 8 liquid to substantially dissipate from said fiber;
- twisting said fiber to increase its density; and 9
- heating said fiber to sinter said carbon particles within said fiber. 10
- 29. (original) The invention as defined in claim 28 further domprising the step of 1 cladding said fiber. 2
- 30. (original) The invention as defined in claim 28 wherein said carbon particles 1 2 are carbon nanotube molecules.
- 31. (original) The invention as defined in claim 28 wherein said carbon particles 2 are carbon fibrils.